DOCUMENT RESUME

ED 342 595 RC 018 585

AUTHOR Huffman, Michael G.; Harwell, Rick
TITLE Park Managers Attitudes toward Climbing: Implications for Future Regulation.
PUB DATE Oct 91
NOTE 7p.; In: Proceedings of the International Conference and Workshop Summaries Book of the International Association for Experiential Education (19th, Lake Junaluska, NC, October 24-27, 1991); see RC 018 571.
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS *Administrator Attitudes; *Environmental Influences; *Outdoor Activities; *Parks; *Recreation; *Standards
IDENTIFIERS *Mountaineering

ABSTRACT

This study examined park managers' attitudes toward adventure climbing and climbing regulations, especially concerning the management of: (1) conflicts (among visitors competing for use of the same resource); (2) impact on the environment; and (3) risk (i.e. implications for rescue and legal liability problems). Questionnaires were sent randomly to 100 managers of national, state, and local parks; 43 usable questionnaires were returned. Results of the survey indicated that almost 40 percent of the managers surveyed used some type of regulation in the management of climbing. Managers perceived climbing to be no different than other recreational activities with regard to the distribution and severity of environmental impact. Less than 89% of the areas studied had any record of visitor conflict involving climbers. Only 16.3% of the managers agreed that their staff is well trained to handle climbing accidents. Results indicated that 85.7% of the agencies who believed they were well trained to handle accidents regulated climbing while only 41.2% of the agencies who believed they were not well trained regulated climbing. While most managers were concerned with the search and rescue issues, they were not unduly alarmed about the possible legal outcomes of climbing. Over 67% of the managers believed that the climbers should pay for the cost of their own rescue. Decisions about whether or not to regulate climbing appeared to be based on liability and search-and-rescue related concerns rather than on concerns about environmental impacts or visitor conflicts. (KS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
This document has been reproduced as received from the person or organization originating it
Minor changes have been made to improve reproduction quality
Points of view or opinions stated in this document do not necessarily represent official OERI position or policy

"PERMISSION TO REPRODUCE THIS MATERIAL IN OTHER THAN PAPER COPY HAS BEEN GRANTED BY
Karen Warren
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"

ED342595

PARK MANAGERS ATTITUDES TOWARD CLIMBING: IMPLICATIONS FOR FUTURE REGULATION

Michael G. Huffman, Ph.D
Memphis State University

Rick Harwell
United States Navy
Morale Welfare and Recreation

Abstract

This study examined the relationship of park and recreation area managers' attitudes toward the sport of climbing as potential reasons for utilizing regulations to manage climbing activity. Managers were asked to compare the use of regulations for climbing to other outdoor recreation activities from the perspective of three major areas: (a) environmental impacts, (b) potential for visitor conflicts, and (c) issues related to legal liability and search and rescue operations. With the exception of issues related to search and rescue operations, it appeared that managers were no more likely to regulate climbing than they were to regulate other outdoor recreational activities. Possible strategies for mitigating regulation and/or prohibition of climbing were presented.

Introduction

Within recent years there has been a tremendous increase in outdoor adventure recreation participation (Ewert, 1987; Jensen, 1985). Such activities include backpacking, hang-gliding, mountaineering, nordic skiing, and spelunking just to name a few. Possible explanations for this increase in popularity include sociological and personal psychological benefits. People frequently engage in recreational activities to develop a feeling of belonging to a group or class of people. Many clubs are associated with outdoor adventure activities and thus provide the potential for sociological benefits (Jensen, 1985). Participants frequently indicate the need for new experiences, excitement, and challenge as reasons for participating in outdoor adventure activities. (Jensen, 1985).

Because of the tremendous resource requirements associated with outdoor adventure activities, most participants look to government agencies (particularly state and federal) to provide areas for adventure recreation. The demand for such recreation has presented managers with three major problems. First, high levels of recreational use can produce severe environmental impacts such as: the deterioration of ground vegetation, the compaction and erosion of soil, stress on wildlife populations, and deterioration of water quality. Second, conflicts can occur between individuals participating in the same recreational activity or in different activities because they are competing to use the same resource. Finally, because of the element of risk associated with adventure activities, managers are occasionally confronted with problems related to legal liability and the need for search and rescue operations. Perhaps because of these problems, several areas have begun to limit participation in climbing and in some cases prohibited participation in the activity entirely.

The purpose of this study was to examine park managers attitudes toward the high adventure activity climbing. Climbing was selected because (a) it has a long history of participation in the United States, (b) it can occur in many different climates and environments thus ensuring national appeal, and (c) because of its long history, many recreation area managers would be familiar with it as opposed to some of the newer adventure activities. Specifically, this study examined managers' perceptions regarding the activity of

RC018585

BEST COPY AVAILABLE

climbing and its relationship to user conflicts, environmental impacts, rescue and legal liability problems. In addition, it explored various types of actions employed by agencies to combat these problems; particularly actions in the form of regulations.

Methodology

A multi-agency list of recreation areas with a history of climbing was compiled from a collection of guidebooks and from inquiries to several mountaineering and climbing organizations. This collection of areas included those managed by the National Park Service, the U. S. Forest Service, the Bureau of Land Management, state park systems, and local recreation areas. In November, 1989, one hundred questionnaires were sent to randomly selected areas from the previous list. The questionnaire polled managers about the history of climbing in their areas, the nature of climbing related accidents, the training of staff, their attitudes about the environmental impact caused by climbing and issues related to liability.

After one follow-up letter, 57 questionnaires were returned for a 57 percent response rate. However, fourteen questionnaires could not be used because respondents indicated that they had insufficient data and as a result did not complete the questionnaire. Thus the number of questionnaires available for analysis was 43. Data were coded and analyzed using the SPSSX statistical package. Frequencies and percentages were computed for all data. Descriptive statistics were calculated for all interval and ratio level data. Comparisons between groups were made using the chi-square statistic.

Results

Level of Regulation

Managers attempting to protect both visitors and natural resources have a wide variety of management techniques at their disposal. These strategies include both direct (regulatory) and indirect (non-regulatory) techniques. Examples of direct techniques include limiting party sizes, zoning uses, requiring permits or check-in procedures, limiting access and imposing fines. Repeated studies have shown that most recreationists prefer an indirect or non-regulatory approach (Manning, 1987).

Results of this study indicated that almost 40 percent of the areas examined used some type of regulations in the management of climbing. Table 1 shows the variety of regulatory techniques used by managers in this study. While limits on party size and restrictions on use due to environmental reasons were applied to all recreationists, many of the other regulations were used only to manage climbing.

Environmental Impacts

Most agencies are charged with the protection of natural resources in the areas they administer. This protection includes the reduction of impacts caused by recreational activities. With regard to this study, managers were asked to compare the areas frequented by climbers with areas used by other recreationists and then compare the level of impact at the climbing areas to determine if it was (a) less of a problem at climbing areas, (b) no different from other areas, or (c) more of a problem at climbing areas. The categories of environmental impacts included: soil erosion and compaction, litter, scars on trees, the cutting of trail switchbacks, scars caused by campfire rings, vandalism, the deterioration of ground vegetation, graffiti, and the chopping of trees and/or branches.

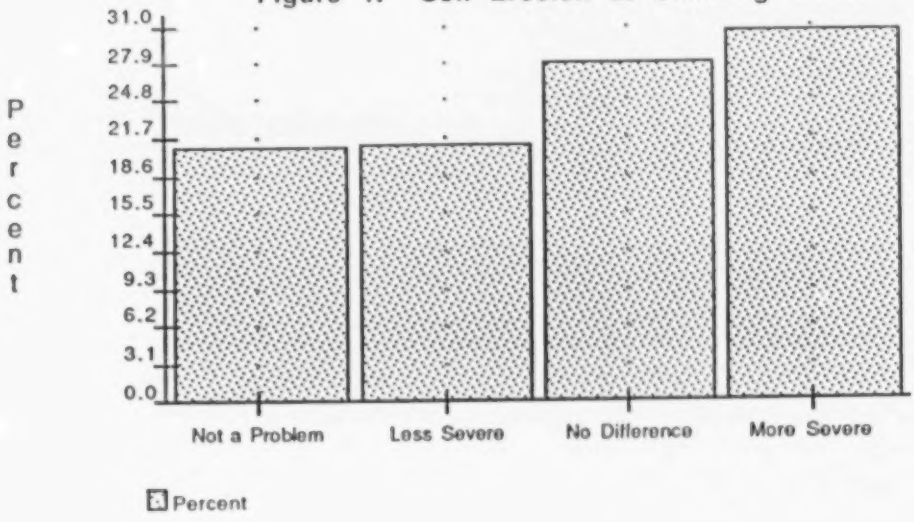
For each of the measures of environmental impact results indicated that managers perceived climbing to be no different than other recreational activities with regard to the distribution and severity of environmental impact. Managers frequently regard soil erosion as one of the worst types of impact that can result from recreational use of a resource. Figure 1 provides a breakdown of managers' perceptions of soil erosion at climbing sites. Results indicated that 20.9 percent believed erosion was not a problem at their areas, 21 percent believed erosion was less of a problem at climbing areas, 27.9 percent could determine no differences in the levels of erosion for climbing areas and areas used by other recreationists, and 30.3 percent perceived erosion to be more severe at climbing areas. These differences were not statistically significant. Because of managers' attitudes and perceptions on these environmental indicators, it was believed that environmental impacts would not motivate the regulation of climbing activities.

Table 1

Frequencies and Percentages of Regulations
Used to Manage Climbing

Type of Regulation	Frequency	Percent
No Regulations Used	17	39.53
Optional Sign-In and Sign-Out	7	16.28
Mandatory Sign-In and Sign-Out	4	9.30
Check-In with Authorities (In Person)	9	20.93
Climbers Must Possess Required Equipment	3	6.98
Climbers Must Provide Own Rescue	0	0.00
Temporary Area Restrictions Due to Environmental Reasons	14	32.56
Permanent Area Restrictions Due to Environmental Reasons	14	32.56
Limits on Party Size	12	27.91
Prohibit Climbing Activity	2	4.65

Figure 1. Soil Erosion at Climbing Areas



Visitor Conflicts

Several studies have indicated that visitor conflicts can arise when recreationists compete with one another for the same resource. Examples that have been well documented include fishermen and water skiers, snowmobilers and ski tourers, motorbike riders and hikers (Manning, 1986). Regulations have frequently been used to attempt to separate competing recreationists and thus reduce conflict.

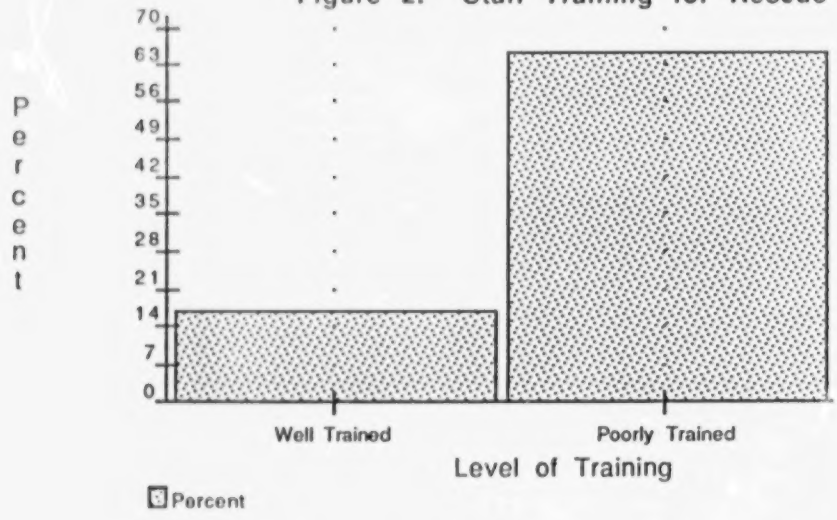
In this study, examples of conflicts between climbers and other visitors were obtained by asking managers to provide a history of such incidents for the past five years. Results indicated that less than 89 percent of the areas studied had any record of visitor conflicts involving climbers. Of the 11 percent that indicated such conflicts, the maximum number of incidents recorded for the entire five year period was 20. Thus, it appears that visitor conflicts with climbers appears to be an insignificant reason for the implementation of regulations in climbing.

Legal Liability and Rescue

Within recent years, there has been increasing concern over the potential problems of legal liability and the cost of search and rescue operations associated with high adventure activities. As an example, Rocky Mountain National Park spent over $363,000 on search and rescue for the fiscal year of 1981-82. Indeed, several parks have begun to prohibit "high risk" recreation altogether. As a partial response to this policy several writers have called for the establishment of "no-rescue" wilderness areas in which government agencies would not rescue accident victims and in some proposals would be legally prohibited from engaging in search and rescue operation in such areas (Harwell, 1987; Nash, 1982; McAvoy and Dustin, 1983).

With regard to this study, managers were asked to respond to the statement "The staff at your area is well trained to handle climbing accidents." Over 65 percent disagreed with the statement while only 16.3 percent agreed (see Fig. 2).

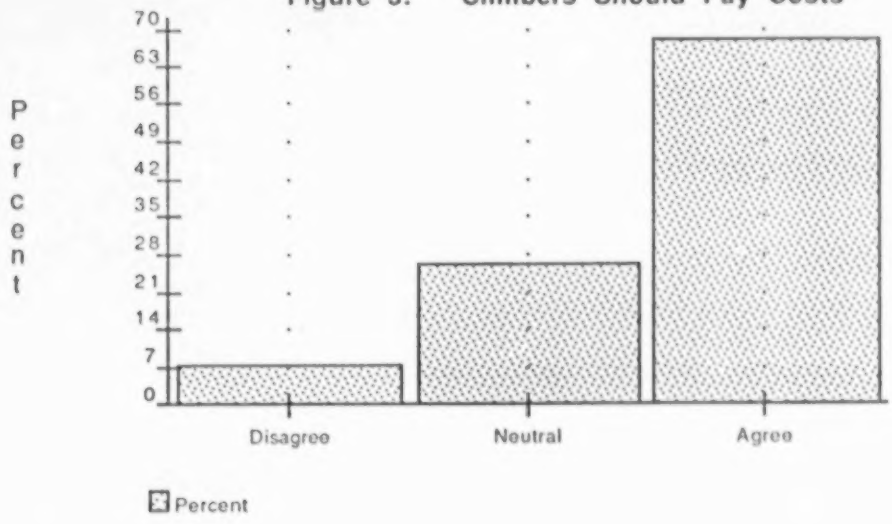
Figure 2. Staff Training for Rescue



To determine if staff preparedness (training) was related to whether or not an agency regulated climbing, the chi-square statistic was computed. Results indicated that 85.7 percent of the agencies who believed they **were** well trained to handle accidents regulated climbing while only 41.2 percent of the agencies who believed they **were not** well trained regulated climbing. This result was found to be statistically significant (chi-square = 7.22, df = 3, $p<0.02$.) Thus it may be that managers who have been exposed to search and rescue training realize the consequences of climbing accidents and desire to control the situation through the use of regulations.

While most managers surveyed were concerned with the search and rescue issues, they were not unduly alarmed about the possible legal outcomes of climbing. When asked to respond to the statement "Climbing is a major cause of liability and litigation for recreation areas", 65.1 percent disagreed, 32.6 percent were neutral and only 4.6 percent agreed with the statement. Finally, one item addressed the financial aspect of search and rescue. When asked whether or not climbers should pay for the cost of their own rescue, 67.5 percent believed that they should, 25.6 percent were neutral, and only 6.9 percent indicated that climbers should not pay for their won rescue (Fig. 3).

Figure 3. Climbers Should Pay Costs



Summary

In conclusion, the decision on whether or not to regulate climbing appeared to be based on liability and search and rescue related concerns rather than on concerns about environmental impacts or visitor conflicts. While it is true that some areas have begun to place severe limitations on climbing, most managers surveyed in this study did not see climbing as a major source of liability. However, this situation may be changing. The financial constraints which limited the sample size of this survey somewhat increases the difficulty of drawing positive conclusions from the results. In the past researchers have viewed the potential proliferation of government regulations as a major limiting factor to the growth of adventure activities such as climbing (White, et. al., 1980). Perhaps future research efforts should explore ways to keep recreation areas open to climbing. Such efforts might include the education of climbers so that they can better manage potential hazards and impacts involved with their sport. To help facilitate this organizations affiliated with climbing might consider instituting self-regulations and more formalized education programs

such as those found in the sport of scuba. As Hollenhorst (1989) pointed out "self-reliance takes on a different meaning in backcountry situations: accident prevention and preparedness is more complex, supplies and equipment must be contrived from available materials and first aid often becomes extended care" (p. 32).

Related to the previous issue are managers' concerns with the implementation of search and rescue operations. Future research might explore the feasibility of using more volunteers in search and rescue operations and investigate new ways to fund search and rescue efforts. Search and rescue involves significant agency resources (personnel, equipment and financial). Of particular concern is the fact that agencies are often not reimbursed for search and rescue efforts (Hollenhorst, 1989).

Finally, it has been observed that freedom and the ability of participants to control their own experiences is central to the meaning of wilderness for many recreationists (Sax, 1980). For this to occur, regulations must be kept to a minimum. Perhaps climbers can regulate their sport so that managers may "resist the temptation to take more and more responsibility for the safety of wilderness recreationists" (McAvoy & Dustin, 1989, p. 42).

References

Ewert, A. (1986). Current Status of Outdoor Adventure Recreation. In *A Literature Review*. The President's Commission on Americans Outdoors.

Harwell, R. (1987). A "No-Rescue" Wilderness Experience: What Are the Implications? *Parks and Recreation*, 22:6, 35-37.

Hollenhorst, S. (1989). Certified Wildland Recreationists? *Trends*, 26:3, 29-33.

Jensen, C. R. (1985). *Outdoor Recreation in America*. Minneapolis: Burgess.

Manning, R. E. (1986). *Studies in Outdoor Recreation*. Corvallis: Oregon State University Press.

McAvoy, L. H. & Dustin, D. L. (1983). In Search of Balance: A No-Rescue Wilderness Proposal. *Western Wildlands*, Summer, 2-5

McAvoy, L. H. & Dustin, D. L. (1989). Resurrecting the Frontier. *Trends*, 26:3,40-42.

Nash, R. (1982). *Wilderness and the American Mind*, New Haven: Yale University Press.

White, R. G.; Schreyer, R.; & Downing, K. (1980). Trends in Emerging High Risk Activities. *Proceedings of the National Outdoor Recreation Trends Symposium*. Durham, NH: U. S. Forest Service, 199-204.